## ABSTRACT

[0049] A system and method for servoing on a moving target within a dynamic scene. According to one embodiment, the system includes a master variable pointing camera system and a plurality of slave variable pointing camera systems positioned around the scene. The system also includes a master control unit in communication with the master variable pointing camera system. The master control unit is for determining, based on parameters of the master variable pointing camera system, parameters for each of the slave variable pointing camera systems such that, at a point in time, the master variable pointing camera system and the slave variable pointing camera systems are aimed at the target and a size of the target in an image from each of the master variable pointing camera system and the slave variable pointing camera systems is substantially the same. The system also includes a plurality of slave camera control units in communication with the master control unit. The slave camera control units are for controlling at least one of the slave variable pointing camera systems based on the parameters for each of the slave variable pointing camera systems. The system may also include a video image sequence generator in communication with the master control unit and the slave camera control units. The video image sequence generator may generate a video image sequence of the target by outputting an image from certain of the master variable pointing camera system and the slave variable pointing camera systems in sequence according to the position of the master variable pointing camera system and the slave variable pointing camera systems around the scene.